MEMO

To: **ABAG Executive Board**
From: **Paul Fassinger, Research Director**
Christy Riviere, Senior Planner
Date: **October 29, 2008**
Subject: **Projections 2009: Performance of Land Use Alternatives**

Summary
This fall, ABAG staff has been meeting with local governments to discuss *Projections 2009*; the bi-annual update to the region's forecast of population, jobs and housing. We have been discussing future land use alternatives for the region and how those alternatives perform against the ABAG Board adopted regional "performance targets." Regional targets are: to reduce driving, congestion, transportation-related carbon emissions and particulate matter in the air. The region has also aimed to increase region-wide transit access and to reduce land consumption. (Note: See Attachment 1 for performance targets.)

A key message during our *Projections* outreach has been the degree to which we may need to consider land use changes if we realistically expect to reduce driving, carbon emissions or to make any measurable difference on the other adopted targets. The magnitude of potential change required has been conveyed through two alternative development scenarios. The first, **Scattered Success**, showcases what can likely by achieved through some new development projects in places where people can drive shorter distances, take transit and/or walk. This scenario assumes that in addition some success scattered about the region, we will also continue to build and support many traditional, auto-oriented developments. The second scenario, **Focused Future**, takes a more intensive approach toward planning and developing a more sustainable region.

This staff report summarizes the core message that has been delivered to local governments.

The Land Use Story: What if?
The production and accumulation of green house gases, including carbon dioxide, are changing the Earth's climate. In the Bay Area, 50 percent of carbon emissions come from the transportation sector. The vast majority of these emissions come from cars and trucks. Most of us live in communities where driving is the only viable transportation option. What if things were different? What if we could re-envision our communities so that they are more resilient against the major changes expected from a growing and aging population, continued high energy prices and, most significantly, global warming?

By 2035, over nine million people will live in the San Francisco Bay Area – two million more than today. Over one-quarter of us will be 65 years old or older. The era of cheap oil will have more than likely come to an end.

How we plan and develop our communities - where and how we house our population and develop our jobs – can either exacerbate or alleviate the impacts anticipated from these pending structural changes.

Many communities in the Bay Area are feeling the impacts of these changes now. Areas that boomed over the last couple of decades with low-density, auto-dependent residential and commercial development, mostly in response to unavailable housing near job centers, are experiencing plummeting housing values.

In some places, values have dropped by as much as 45 percent over the last two years. Residents in these same communities have few travel options, and are experiencing soaring commute costs, with little relief in sight. Older residents, those now unable to drive must rely on family and friends to shuttle them to and from doctor's appointments and their daily errands.

Communities with viable transit, those that are walkable and have plentiful jobs, or easy access to them, are seemingly more resilient. Housing values in these areas have declined nominally, or have remained fairly steady. When gas prices doubled, many residents simply opted to take transit, dragged their bikes out of their garage or bought a new pair of walking shoes. Older persons walk or take transit to run their errands and visit friends. Resilience comes principally from the development pattern, the relative location of housing and jobs, access to transit, and the walkability of the community.

Development patterns and access to transportation alternatives greatly affect the amount of driving we do, and therefore our transportation-related carbon dioxide emissions. In communities with some density, transit and jobs, household greenhouse-gas emissions from transportation activities can be as low as 17 pounds on an average weekday. In outer, more remote parts of the Bay Area, where travel options are limited, emissions can be as high as 53 pounds per day.

This fall, we focus on telling the story of our region's future development pattern through performance targets. We will demonstrate how the location of homes and jobs can reduce driving and our transportation-related emissions. We will discuss the challenges we face in planning and developing our communities in the coming decades - challenges that are essentially about untangling ourselves from our dependent relationship to the automobile, a relationship fueled by unknown environmental consequences, historically cheap land and even cheaper oil.

Two alternative development scenarios help tell the story. The first, **Scattered Success**, demonstrates some success scattered about the region, in addition to continued auto-oriented development. The second, **Focused Future**, takes a more thorough approach toward planning and developing a sustainable region.

For each scenario, we describe the future through the targets. How much driving will we do? What will our region-wide carbon emissions be? What will air quality be like? How many people will be able to get to work or services on foot or by public transit? Under each scenario, what will it take or will it even be possible to reduce driving and therefore the Bay Area's transportation-related emissions?

Scattered Success

Scattered Success reflects some degree of success in responding to a growing and aging population, and to the need for more transportation efficient communities. San Francisco, Oakland, San Jose, Walnut Creek, San Leandro, San Mateo, Redwood City, Mountain View, Vallejo and several other cities around the region have built relatively higher density residential and mixed use projects near their transit stations. As a result, there has been a modest increase in the number of people living in the Bay Area's urban core. Jobs are also somewhat more concentrated in urban areas, although more people drive into the region for work than ever before. People living in areas with transit use it frequently to get to and from work. On the weekends, however, they still mostly drive to visit friends or to do their shopping, for most everything else is miles away and auto-oriented.

Our **Scattered Success** has moved us farther away from our regional objectives: to reduce driving, clean our air, to reduce greenfield development and to improve access to transit and jobs. More people are driving than ever before. Our carbon emissions have gone up by several thousand tons per day, to over 92 thousand tons. Particulate matter in the air, both coarse and fine dust, has also risen. We have barely increased people's direct access to transit and jobs. We have converted tens of thousands of acres of our

open lands into single family homes, shopping centers and office parks. We had hoped to limit our appetite for land to a mere 900 acres per year, or a total of 22,500 acres.

Focused Future

Focused reflects a future filled with a resounding response to our growing population and to the need for more transportation efficient communities. San Francisco, Oakland, San Jose, Berkeley, Dublin, Pleasanton, Livermore, Concord, Pleasant Hill, Walnut Creek, Vallejo, San Leandro, San Mateo, Redwood City, Mountain View, Palo Alto, Daly City and many other cities around the region have created complete communities with access to transit and that are highly walkable, where grocery stores, shops, cafes, and other daily destinations are a short distance from people's homes. The number of people now living in the Bay Area's urban core has gone up to 57 percent, compared to only 35 percent 25 years ago. Jobs are also more concentrated in urban areas, and fewer people drive into the region than ever before. People living in areas with transit use it frequently to get to and from work. And even on the weekends, they can either walk or take a bus to visit friends or to do their shopping, for everything is a short trip away.

Our **Focused Future** has brought us closer to our regional objectives. Fewer people are driving on a per capita basis than 25 years ago. And even though our carbon emissions have yet to come down to below 1990 levels, they have decreased by nearly 5 thousand tons, to a total of 85 thousand tons per day. This is 5 thousand tons less per day than in 2006. Particulate matter in the air, both coarse and fine dust, has risen, though by less than they would have been otherwise. More people have access to transit and jobs. Much of the Bay Area's population lives in communities that have high quality transit within walking distance of their homes. We have also converted less land into urban development than we would have under our **Scattered Success.**

Land Use, Necessary, Not Sufficient

A key challenge during our fall outreach has been to convey the inter-relationship between land use, infrastructure, pricing, technology, and individual behavior in meeting the regional targets. While powerful, land-use changes alone will not be sufficient in reducing our transportation-related emissions. Reducing emissions from the transportation sector will require new transportation infrastructure, like rail extensions, more busses and even some freeway improvements. Reducing emissions will also require technological improvements to our cars so that they burn cleaner and use less gasoline per mile. We will also need to implement pricing measures - like parking fees, toll lane charges and bridge tolls - so that more people become inspired through their wallets to use their cars less. We will need a major shift in personal behavior, where more people simply choose, for whatever reason, to drive less, walk or take transit over driving.

If we seriously intend to reduce this region's transportation carbon emissions, each of these strategies will be necessary. There is no one solution. There will be no easy answers. And in all actuality, land use, infrastructure, technology, pricing, and behavioral changes are highly dependent on one another for any one measure to succeed. For transit to succeed, sufficient densities need to be in place. If driving becomes more expensive, then we need to have affordable options available. If we want people to choose walking or transit, we have to build our communities at a pedestrian scale and have real transit options available.

Attachment 1

Provisional Regional Performance Targets

Bay Area communities have made substantial progress toward moving away from a "business as usual" development pattern. We have had some success in planning and developing more transportation efficient communities near our BART stations, VTA transit areas, MUNI stops and ferry terminals. The **Scattered Success** scenario largely documents this progress. Scattered extends our current level of success twenty-five years out into the future. However, as you read how that future scenario plays out, it will quickly become clear that we need to get **Focused**, and do more.

When and how will we know when we have done enough?

We can only know we have achieved success by setting clear, measurable goals and then working toward those goals. The Association of Bay Area Governments and the Metropolitan Transportation Commission[1] have set such goals. We have set provisional long-term targets to reduce region-wide driving, greenhouse gases, to improve air quality, protect our land resources and to promote equity. These targets are mostly based on existing California laws, including Assembly Bill 32, California's Global Warming Solutions Act of 2006.

Specifically, by 2035 we aim to:

- ⇨ Reduce driving per person by 10 percent below today's levels
- ⇨ Reduce traffic congestion, measured by hours of delay, by 20 percent below today's levels.
- ⇨ Reduce carbon dioxide emissions by 40 percent below 1990 levels.
- ⇨ Reduce PM2.5 (fine dust particles) emissions by 10 percent below today's levels.
- ⇨ Reduce PM10 (coarser particulate mater) by 45 percent below today's levels.
- ⇨ Limit greenfield development to 900 acres per year over the next 25 years.
- ⇨ Increase access to jobs and essential services via transit or walking by 20 percent above today's levels.

[1] The performance targets listed here were adopted by ABAG's Executive Board on May 15, 2008. They have been modified from those originally drafted by the Metropolitan Transportation Commission. The "Limit greenfield development" target was added by ABAG's Board. The equity target was changed from reducing transportation and housing costs to increasing non-auto dependent access to jobs and services.